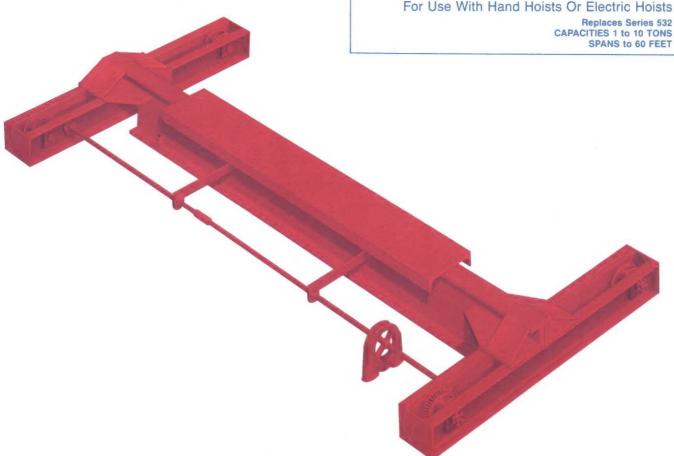




SERIES 535

Top Running Single Girder Crane Hand Operated For Use With Hand Hoists Or Electric Hoists

CAPACITIES 1 to 10 TONS



The Wright American Series 535 top running single girder hand operated crane is engineered for any service where horizontal travel distance is not too great and where load needs to be frequently or rapidly lifted. The notched bridge beam design is best where overhead clearance and height of lift are important.

WRIGHT®

AMERICAN CRANE

The Series 535 top running single girder crane, when combined with a Wright American electric trolley hoist is an excellent installation where it is practical to support crane rails from building columns.

All crane components are selected to give top performance, long, dependable service, and lowest maintenance.

The Series 535 crane is offered in capacities from one through ten tons, with spans up to 60 feet.

Bridge consists of heavy section beam, rigidly welded to the end truck, reinforced with welded gusset plates to provide insquare operation.

The end trucks are of welded steel channel construction, equipped with diaphragms, jig welded and bored to provide alignment of wheels, axles and drive shaft. Wheel and gear

replacement is accomplished without dismantling end trucks because of easy-to-remove axle.

The end truck wheels are double flange alloy steel with hardened tapered treads. Wheels are equipped with prelubricated tapered roller bearings, two to each wheel.

The drive shaft is geared to both end trucks to provide uniform travel. Handwheel is operated from the floor by pulling on an endless hand chain. The operating wheel, which may be located in any convenient location on the cross shaft, is equipped with swing chain guide that permits reasonable side pulling and rapid handling of chain without restricting the passage of the chain through the guide.

Standard electrical equipment includes manually operated fused mainline disconnect switch with lockout provision and flat wire festoon tagline bridge electrification.

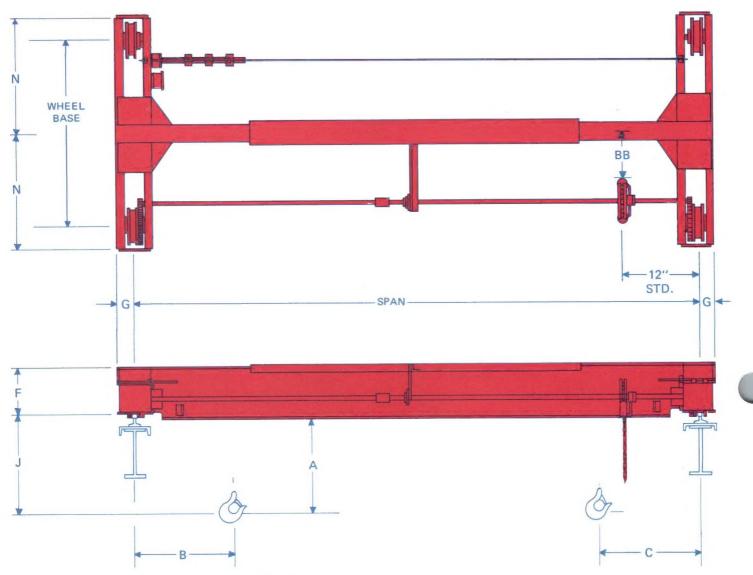
The Series 535 cranes are custom designed using engineered components, which are built to provide a square, exact span and true alignment. Each crane is fully assembled before shipment.



SERIES 535 Top Running Single Girder Crane Hand Operated For Use With Hand Hoists Or Electric Hoists

1 to 10 TONS

53-6 Issued 1-4-88



A dimensions represent hoist headroom. Refer to hoist data pages.

B and C dimensions represent hoist end approach. Refer to dimension on Wright American, Wright-Way® or Work-rated hoist data pages. B and C dimensions based on tagline bridge electrification, end approach dimensions vary according to tagline tow arm location on hoist and tagline trolley stack-up.

NOTE: Minimum OSHA clearance between crane and obstruction requires 2" lateral and 3" overhead.

Standard crane does not include runway collector bracket and runway collectors. See modification and accessories section. Left-hand runway is standard location of runway collectors.

Order by Product Number. Specify: Exact span, runway rail and beam size, required drop of handchain (15'-0" drop standard).

State from which runway beam mainline conductors are located. (Wright standard on left hand runway.) Power supply, horsepower of all motors, and all optional equipment desired.

End Truck Product Number	Wheel Tread Dia. (In.)	Wheel Base (In.)	Max. ASCE Rail	G (ln.)	N (ln.)	BB (ln.)
4300370	8	60	40 #/Yd	5	36	19
4300380	8	100	40 #/Yd	5-3/4	56	39
4300390	10	60	40 #/Yd	5-1/2	37-3/8	18
4300400	10	60	60 #/Yd	5-1/4	37-3/8	18
4300410	10	100	40 #/Yd	6-1/2	57-3/8	38
4300420	10	100	60 #/Yd	6-1/2	57-3/8	38

- (a) If hoist weight exceeds listed maximum, contact factory.
- (b) Wheel loads include:
 - (1) 15% live load impact allowance
 - (2) 10% dead load allowance (1/2 crane wt. + max. hoist wt.)
- (c) If crane is used with hand hoist, impact allowances need not be included.
- (d) Refer to Wright structural beam design guide for other requirements.
- (e) Dimensions approximate



SERIES 535 Top Running Single Girder Crane Hand Operated For Use With Hand Hoists Or Electric Hoists

1 to 10 TONS

53-7 Issued 1-4-88

Cap.	Max. Span (Ft.)	Crane Product Number	End Truck Product Number	Bridge Beam	Capping Channel	F	J	Beam Selection (a) Based on Max.	Net Wt.	Wheel (b)
1.0	19 22 27 31 35 38 40 42 47 52 56 60	5350010 5350020 5350030 5350040 5350050 5350060 5350070 5350080 5350100 5350110 5350120	4300370 4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$10x25.4 # \$12x31.8 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$20x66 # \$22x80 # \$24x80 # W27x84 # W30x99 #	Channel	(In.) 10 11 13 18 18 18-1/4 18-1/4 22-1/4 22-1/4 25-1/4 25-1/2	(In.) A+0 A+1 A+2 A+0 A+2 A+0 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+4-3/4	Hoist Wt. of: (Lbs.)	1510 1780 2290 2880 3550 3780 4560 5380 6380 6982 8568 9973	(Lbs.) 2275 2349 2489 2651 2836 2899 3114 3339 3614 3780 4216 4602
2.0	17 21 25 28 32 38 40 42 47 52 56 60	5350130 5350140 5350150 5350160 5350170 5350180 5350190 5350200 5350210 5350220 5350230 5350240	4300370 4300370 4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$12x31.8 # \$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # \$24x80 # \$24x80 #	C8x11.5 # C8x11.5 # C10x15.3 # C10x15.3 # C12x20.7 # C15x33.9 # C15x33.9 #	11 13 18 18 13-1/4 18-1/4 18-1/4 22-1/4 22-1/4 25-1/4 25-1/2	A+1 A+2 A+0 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+4 A+4-3/4	2000	1560 1970 2500 3010 2930 3780 4560 5380 6380 7228 8568 9973	3829 3942 4088 4228 4206 4439 4654 4880 5155 5388 5756 6143
3.0	15 18 22 25 32 36 40 42 46 52 56 60	5350250 5350260 5350270 5350280 5350300 5350310 5350310 5350320 5350330 5350340 5350350 5350360	4300370 4300370 4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$12x31.8 # \$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # W27x102 # W30x116 #	C8x11.5 # C8x11.5 # C10x15.3 # C10x15.3 # C10x15.3 # C12x20.7 # C15x33.9 # C15x33.9 #	11 13 18 18 13-1/4 18-1/4 18-1/4 18-1/4 22-1/4 22-1/4 25-1/2 25-1/2	A+1 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2	2000	1490 1810 2310 2790 2930 3630 4560 5380 6334 7228 9577 10654	4960 5048 5185 5317 5356 5548 5804 6030 6292 6538 7184 7480
4.0	16 19 23 29 36 40 42 48 52 56 60	5350370 5350380 5350390 5350400 5350440 5350420 5350430 5350440 3530450 5350460 5350470	4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # \$27x102 # \$30x116 #	C8x11.5 # C10x15.3 # C12x20.7 # C12x20.7 # C12x20.7 # C15x33.9 # C15x33.9 #	13 18 18 13-1/4 18-1/4 18-1/4 18-1/4 22-1/4 22-1/2 25-1/2	A+2 A+0 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+5	2400	1710 2100 2640 2740 3780 4790 5534 6775 7856 9577 10654	6390 6498 6646 6674 6960 7237 7442 7783 8080 8554 8850
5.0	15 18 21 27 33 36 40 42 44 48 55 60	5350480 5350500 5350500 5350510 5350520 5350530 5350530 5350560 5350560 5350570 5350580 5350590 5350600	4300370 4300370 4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x80 #	C10x15.3 # C10x15.3 # C10x15.3 # C12x20.7 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 #	13 18 18 13-1/4 18-1/4 18-1/4 18-1/4 22-1/2 22-1/4 22-1/2 25-1/2 25-1/2	A+2 A+0 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2	3000	1660 2030 2500 2720 3540 4200 4790 6029 6341 7350 7856 9577 10654	7857 7958 8089 8148 8374 8555 8717 9058 9144 9421 9560 10034 10330
6.0	14 16 19 24 31 33 36 40 41 47 52 56 60	5350610 5350620 5350630 5350640 5350660 5350660 5350670 5350690 5350700 5350710 5350720 5350720	4300390 4300390 4300390 4300390 4300390 4300390 4300390 4300410 4300410 4300410 4300410	\$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$20x66 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x80 #	C10x15.3 # C10x15.3 # C10x15.3 # C10x15.3 # C10x15.3 # C12x20.7 # C12x20.7 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 #	15 15-1/2 20 15-1/4 15-3/4 20-1/4 24-1/4 24-1/4 24-1/2 24-1/2 27-1/2 27-1/2	A+0 A+2-1/2 A+0 A+0 A+2-1/2 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0	3100	1850 2150 2560 2772 3620 4180 4975 5620 6434 7648 8276 9997 11413	9114 9196 9309 9367 9601 9755 9973 10151 10374 10708 10881 11354 11743
7.5	15 18 25 28 31 36 38 40 44 48 55 60	5350740 5350750 5350760 5350770 5350780 5350790 5350800 5350810 5350820 5350830 5350840 5350850 5350850	4300390 4300390 4300390 4300390 4300390 4300390 4300390 4300410 4300410 4300410 4300410	\$18x54.7 # \$20x66 # \$18x54.7 # \$18x54.7 # \$18x54.7 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x106 # \$27x102 # \$27x102 #	C8x11.5 # C10x15.3 # C10x15.3 # C12x20.7 # C12x20.7 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 #	15 20 15-3/4 15-3/4 20-1/4 20-1/4 24-1/2 24-1/2 24-1/2 24-1/2 27-1/2 27-1/2	A+2-1/2 A+0 A+2-1/2 A+2-1/2 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0	3100	2090 2490 3040 3380 3390 4640 5410 6055 7282 7771 9628 9997 11902	10905 11015 11166 11260 11427 11606 11817 11995 12332 12467 12978 13079 13603
10.0	13 16 20 22 27 30 35 40 42 48 55 60	5350870 5350880 5350890 5350900 5350910 5350920 5350930 5350940 5350950 5350960 5350970 5350980 5350990	4300390 4300390 4300390 4300390 4300390 4300390 4300390 4300410 4300410 4300410 4300410 4300410	\$18x54.7 # \$20x66 # \$18x54.7 # \$18x54.7 # \$18x54.7 # \$20x66 # \$20x66 # \$24x80 #	C8x11.5 # C10x15.3 # C10x15.3 # C12x20.7 # C12x20.7 # C15x33.9 # C15x33.9 # C15x33.9 # MC18x42.7 # MC18x42.7 #	15-1/2 20 15-3/4 15-3/4 20-1/4 20-1/4 24-1/2 24-1/2 24-1/2 27-1/2 27-1/2 27-1/2	A+2-1/2 A+0 A+2-1/2 A+2-1/2 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0	3200	1975 2340 2688 2930 3629 4087 5069 6170 7037 9018 9420 10340 11902	13803 13904 13999 14066 14258 14384 14654 14957 15195 15740 15850 16104 16533



SERIES 535 Top Running Single Girder Crane Hand Operated For Use With Hand Hoists Or Electric Hoists

1 to 10 TONS

53-8 Issued 1-4-88

STANDARD EQUIPMENT SPECIFICATIONS

DESIGN FACTORS Standard capacity ratings shall represent the net rated load at the hook of any type of hoist with the same load rating installed on the crane having a hoist trolley weight within the established limits. The crane shall be so designed that the load carrying parts, except structural members and hoisting ropes and gearing, shall be designed so that the calculated static stress in the material, based on the rated load, shall not exceed 20% of the published average ultimate strength of the material. This limitation of stress provides a margin to allow for variations in the properties of materials, manufacturing and operating conditions, and design assumptions. However, under no condition shall the crane be loaded beyond its rated capacity.

BEAM Bridge beam shall be designed in accordance with latest specifications of the Crane Manufacturers Association of America and shall be of standard structural shapes, constructed in accord with AISC specifications. Under full load the beam deflection shall not exceed 1/600 of the span. Bridge beam shall be selected structural steel member and shall provide level and straight tread surfaces for the hoist trolleys. The bridge beam shall be braced and welded to maintain squareness with the trucks. Bridge beam shall have adequate lateral stiffness with minimum lateral moment of inertia of 1/20 that of the vertical moment of inertia.

END TRUCKS The end truck frame shall be welded from structural shapes into a single unit as to prevent distortion and mismatch of gears under maximum rated load. End truck wheelbase shall be a minimum of 1/8 of the crane span. One wheel in each truck shall be geared and meshed with a pinion.

The truck shall contain diaphragm members welded to truck frames to maintain alignment and distribute truck loads uniformly on inner and outer truck member. The truck shall be designed so that the drop of the truck will be limited to one inch in case of axle or wheel failure. Attachment of end truck to bridge beam shall be by welding to insure true alignment.

CRANE WHEELS Crane wheels shall be double-flange alloy steel and have tapered tread surfaces hardened to 375 to 425 Brinell. Each wheel shall be supported on tapered roller bearings mounted on stationary axies suitable to take radial and thrust loads. The wheels shall be lubricated at the factory with sodiumbase grease and provided with a suitable reservoir of lubricant to eliminate the need for field lubrication. Wheel axies must have mounting nuts for bearing adjustment. Wheel mounting shall be designed so that axies and wheels can be removed without disturbing other truck elements of their alignment. Wheel treads shall be smooth, true and uniform within .010 inch tread diameter on all wheels.

RUNWAYS The crane runway, runway rails, and stops shall be furnished and installed by the user.

The runway rails shall be straight, parallel, level, and at the same elevation. The distance center to center and the elevation shall be within a tolerance of plus or minus 1/8". The runway rails should be standard rail sections of a proper size for the crane to be installed and must be provided with proper rail splices.

The crane runway shall be designed with sufficient strength and rigidity to prevent undue lateral or vertical deflection.

WELDING Welding shall be done by certified welders and shall be in accordance with the American Welding Society standards. All welds shall be ductile, shall have good weld penetration free of cracks and undercuts, and the welds shall manifest workmanlike appearance.

CRANE DRIVE Hand driven crane drive shall be by pulling on an endless chain. Chain wheel shall be equipped with a swinging chain guide to effectively prevent "gagging" of the chain when being rapidly handled. Operating wheel shall be attached to a squaring shaft extending the length of the bridge. A pinion shall be keyed to each end of the shaft to engage the gear on the drive wheels.

DRIVE SHAFT The drive shaft shall be supported on prelubricated ball bearings. It shall be designed for a maximum torsional stress of 6,000 psi. The drive shaft shall be so arranged and designed that the maximum torsional twist angle in the drive shaft, when referred to the drive wheels of the crane, shall not exceed one degree of the wheel rotation under maximum rated load regardless of load location.

BEARING LIFE All bearings in the crane wheels, and those supporting the squaring shafts shall be designed for 3,000 hours B-10 bearing life minimum.

GEARING All gears shall be cut from solid blanks with 20 degree pressure angle involute shape for high strength and shall comply with AGMA specifications for load ratings.

ELECTRICAL CONTROLS Fusable manual disconnect shall be mounted on the crane.

BRIDGE CONDUCTORS AND WIRING Flat wire festoon tagline bridge conductors shall be provided with the crane to provide fully insulated bridge electrification. All other wiring of the crane shall be in rigid or flexible conduit in accordance with National Electrical Code.

PAINTING The crane before shipment shall be painted with one coat of red semi-gloss lead free enamel.

OPERATING AND MAINTENANCE Proper erection instructions, parts list and maintenance instructions will be furnished with the crane.

WARNING

Equipment described herein is not designed for, and should not be used for lifting, supporting, or transporting humans. Modifications to upgrade, rerate, or otherwise alter the hoist or crane equipment shall be authorized only by the original manufacturer or qualified professional engineer.

Failure to comply with any one of the limitations noted herein may result in serious bodily injury.



Acco Products Division

A member of the Acco Material Handling Group

76 Acco Drive, P.O. Box 792, York, PA 17405 Telephone 717 741-4863 FAX 717 741-4956 Telex 84-0412



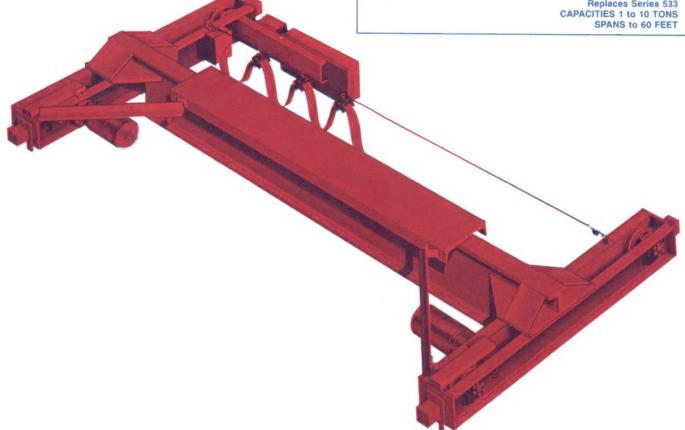


Issued 1-4-88 Supersedes 3-1-84

SERIES 536

Top Running Single Girder Motorized Dual Drive Crane For Electric Hoists

Replaces Series 533



The Wright American Series 536 top running single girder motorized dual drive crane for use with electric hoists is engineered for service of a variety of loads and applications where an economical, reliable unit is required. The notched bridge beam design is best where overhead clearance and height of lift are important.

The Series 536 top running single girder crane, when combined with a Wright American electric trolley hoist, is an excellent installation where it is practical to support crane rails from building columns.

All crane components are selected to give top performance, long, dependable service, and lowest maintenance.

The Series 536 crane is offered in capacities from one through ten tons, with spans up to 60 feet. Bridge speeds available are 70 and 120 FPM single speed with ACM. Optional two speed at 70/23 or 120/40 FPM with ACM is available.

Bridge consists of heavy section beam, rigidly welded to the end truck, reinforced with welded gusset plates to provide insquare operation.

The end trucks are of welded steel channel construction equipped with diaphragms, jig welded, and bored to provide alignment of wheels, axles and drive shaft. Wheel and gear replacement is accomplished without dismantling end trucks

because of easy-to-remove axle. Rail sweeps and energyabsorbing rubber bumpers are included for the crane's protection.

The end truck wheels are double flange alloy steel with hardened treads. Wheels are equipped with prelubricated tapered roller bearings, two to each wheel.

The enclosed dual drive helical gear reduction units, complete with ACM control and A.C. disc brakes, provide smooth bridge motion and excellent load control. The Acco ACM is an all-solid state acceleration control module designed exclusively for crane and trolley traverse motion.

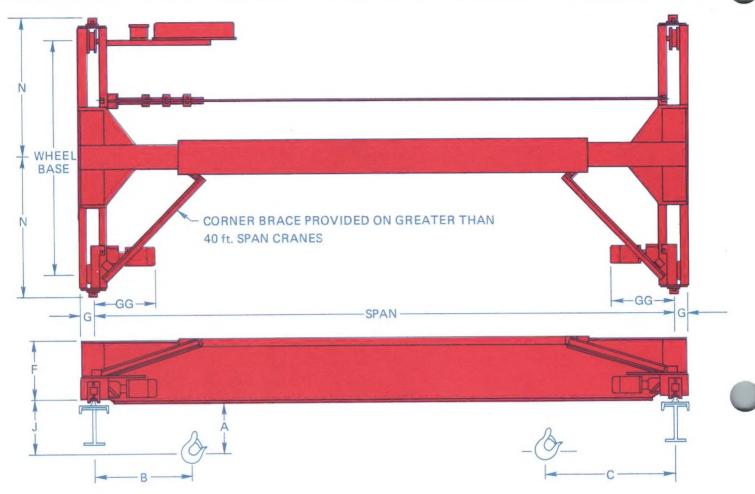
Standard electrical equipment includes NEMA type 3R enclosure, mainline magnetic contactor, manually operated fused mainline disconnect switch with lock-out provision, branch circuit fuses, single speed magnetic reversing bridge control. transformer with fused secondary, and flat wire festoon tagline bridge electrification. Optional pendant or traveling push button from the bridge is available.

The Series 536 cranes are custom-designed, using engineered components, which are built to provide a square, exact span and true alignment. Each crane is fully assembled before shipment.



SERIES 536 Top Running Single Girder Motorized Dual Drive Crane For Electric Hoists

53-10 Issued 1-4-88



A dimension represents hoist headroom. Refer to hoist data pages.

B and C dimensions represent hoist end approach. Refer to dimensions on Wright American, Wright-Way or Work-rated hoist data pages.

B and C dimensions based on tagline bridge electrification, end approach dimensions vary according to tagline tow arm location on hoist and tagline trolley stack-up.

NOTE: Minimum OSHA clearance between crane and obstruction requires 2" lateral and 3" overhead. Standard crane does not include runway collector bracket and runway collectors. See modification and accessories section. Left-hand runway is standard location of runway conductors.

End Truck Product Number	Wheel Tread Dia. (In.)	Wheel Base (In.)	Max ASCE Rail	G (ln.)	N (In.)	GG (In.) (e)
4300370	8	60	40 #/Yd	5	36 (d)	30
4300380	8	100	40 #/Yd	5-3/4	56	30-1/4
4300390	10	60	40 #/Yd	5-1/2	37-3/8 (d)	30-1/4
4300400	10	60	60 #/Yd	5-1/2	37-3/8 (d)	30-1/4
4300410	10	100	40 #/Yd	6-1/2	57-3/8	30-1/2
4300420	10	100	60 #/Yd	6-1/2	57-3/8	30-1/2

- (a) If hoist weight exceeds listed maximum, contact factory.
 (b) Wheel loads include:

 (1) 15% live load impact allowance
- (2) 10% dead load allowance (1/2 crane wt. + max. hoist wt.)
- noist wt.)

 (c) HP shown is for each motor; two required per crane
 (d) Add 9 inches to "N" dimension on trailer side only for
 addition of optional traveling pushbutton.

 Dimension shown is for drive with two speed motor.
 Subtract 2 inches for drive with single speed motor.
- Refer to Wright structural beam design guide for other requirements.
- (g) Dimensions approximate.



SERIES 536 Top Running Single Girder Motorized Dual Drive Crane For Electric Hoists

1 to 10 TONS

53-11 Issued 1-4-88

								Beam Selection	H.P. for	FPM (c)		Wheel
Cap.	Max. Span	Crane Product	End Truck Product	Bridge	Capping	F	J	Based on Max. Hoist Wt. of:			Net Wt.	Load (Lbs.) (b)
(Tons)	(Ft.)	Number 5360010	Number '4300370	Beam \$10x25.4 #	Channel	(In.)	(In.) A+0	· (Lbs.) (a)	70	120	(Lbs.) 1640	2311
1.0	22 27 31 35 38 40 42 47 52 56 60	5360020 5360030 5360040 5360050 5360060 5360070 5360080 5360100 5360110 5360120	4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$12x31.8 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # W27x84 # W30x99 #	C8x11.5 # C10x15.3 # C10x15.3 # C10x15.3 # C10x15.3 # C15x33.9 # C15x33.9 #	11 13 18 18 18-1/4 18-1/4 18-1/4 22-1/4 22-1/4 25-1/4 25-1/2	A+1 A+2 A+0 A+2 A+0 A+2 A+2 A+2 A+2 A+2 A+3/4 A+4-3/4	1290	1/2	1/2	1880 2360 2930 3570 3790 4560 5510 6630 7130 8860 10300	2376 2508 2665 2841 2902 3114 3375 3683 3820 4296 4692
2.0	17 21 25 28 32 38 40 42 47 52 56 60	5360130 5360140 5360150 5360160 5360170 5360180 5360200 5360200 5360220 5360230 5360240	4300370 4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$12x31.8 # \$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # W27x84 # W30x99 #	C8x11.5 # C10x15.3 # C10x15.3 # C12x20.7 # C15x33.9 # C15x33.9 #	11 13 18 18 13-1/4 18-1/4 18-1/4 22-1/4 22-1/4 25-1/4 25-1/2	A+1 A+2 A+0 A+2 A+2 A+2 A+2 A+2 A+1-3/4 A+4-3/4	2000	1/2	1/2	1700 2090 2580 3080 2970 3790 4560 5510 6906 7430 8860 10300	3868 3975 4110 4247 4217 4442 4654 4915 5299 5443 5837 6233
3.0	15 18 22 25 32 36 40 42 46 52 56 60	5360250 5360260 5360270 5360280 5360290 5360300 5360310 5360320 5360330 5360340 5360350 5360360	4300370 4300370 4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$12x31.8 # \$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # \$24x80 # \$24x80 #	C8x11.5 # C10x15.3 # C10x15.3 # C10x15.3 # C10x15.3 # C10x20.7 # C15x33.9 # C15x33.9 #	11 13 18 18 13-1/4 18-1/4 18-1/4 18-1/4 22-1/4 22-1/4 25-1/2 25-1/2	A+1 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+5	2000	1/2	1/2	1630 1940 2410 2880 2970 3650 4560 5510 6530 7430 9920 11370	4998 5084 5213 5342 5367 5554 5804 6065 6345 6593 7278 7677
4.0	16 19 23 29 36 40 42 48 52 56 60	5360370 5360380 5360390 5360400 4360410 4360420 4360430 5360440 5360450 5360470	4300370 4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380	\$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # \$24x80 # \$24x80 #	C8x11.5 # C10x15.3 # C12x20.7 # C12x20.7 # C15x33.9 # C15x33.9 # C15x33.9 #	13 18 18 13-1/4 18-1/4 18-1/4 18-1/4 22-1/4 22-1/2 25-1/2	A+2 A+0 A+2 A+0 A+2 A+2 A+2 A+2 A+2	2400	1/2	1/2	1850 2220 2740 2800 3790 4790 5750 7010 8150 9920	6429 6531 6674 6690 6962 7237 7501 7848 8161 8648
	15 18	5360470 5360480 5360490	4300370	S15x42.9 #	#	25-1/2	A+5 A+2			3/4	11370 1810	9047 7898
5.0	21 27 33 36 40 42 44 48 52 56 60	5360500 5360510 5360520 5360530 5360540 5360550 5360560 5360570 5360580 5360590 5360600	4300370 4300370 4300370 4300370 4300370 4300370 4300380 4300380 4300380 4300380 4300380	\$18x54.7 # \$20x66 # \$15x42.9 # \$18x54.7 # \$20x66 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # \$24x80 # \$24x80 # \$24x80 #	C10x15.3 # C10x15.3 # C10x15.3 # C12x20.7 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 #	18 18 13-1/4 18-1/4 18-1/4 18-1/4 18-1/2 22-1/2 22-1/2 22-1/2 25-1/2 25-1/2	A+0 A+2 A+0 A+2 A+2 A+2 A+2 A+2 A+2 A+2 A+5	3000	1/2	1/2	2160 2600 2800 3570 4220 4790 6340 6580 7670 8150 9920	7994 8115 8170 8382 8561 8717 9143 9210 9509 9641 10128 10527
6.0	14 16 19 24 31 33 36 40 41 47 52 56 60	5360610 5360620 5360630 5360640 5360660 5360660 5360670 5360690 5360700 5360710 5360720 5360720	4300390 4300390 4300390 4300390 4300390 4300390 4300390 4300410 4300410 4300410 4300410	\$15x42.9 # \$18x54.7 # \$20x66 # \$15x42.9 # \$18x54.7 # \$20x66 # \$24x80 #	C10x15.3 # C10x15.3 # C10x15.3 # C10x15.3 # C10x15.3 # C12x20.7 # C12x20.7 # C15x33.9 # C15x33.9 # C15x33.9 #	15 15-1/2 20 15-1/4 15-3/4 20-1/4 24-1/4 24-1/4 24-1/2 24-1/2 27-1/2 27-1/2	A+0 A+2-1/2 A+0 A+0 A+2-1/2 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0	3100	1/2	3/4	2000 2290 2690 2852 3660 4209 4995 5620 6689 7970 8570 10340 11790	9155 9235 9345 9389 9612 9762 9979 10151 10444 10797 10962 11449 11847
7.5	15 18 25 28 31 36 38 40 44 48 52 56 60	5360740 5360750 5360760 5360770 5360780 5360790 5360800 5360810 5360830 5360830 5360840 5360850 5360860	4300390 4300390 4300390 4300390 4300390 4300390 4300390 4300390 4300410 4300410 4300410 4300410	\$18x54.7 # \$20x66 # \$18x54.7 # \$18x54.7 # \$20x66 # \$20x66 # \$24x80 # \$24x80 # \$24x80 # \$24x106 # W27x102 # W30x116 #	C8x11.5 # C10x15.3 # C10x15.3 # C12x20.7 # C12x20.7 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 # C15x33.9 # MC18x42.7 #	15-1/2 20 15-3/4 15-3/4 20-1/4 20-1/4 24-1/2 24-1/2 24-1/2 24-1/2 27-1/2	A+2-1/2 A+0 A+2-1/2 A+2-1/2 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0 A+0	3100	1/2	3/4	2230 2620 3120 3450 4030 4660 5409 6146 7610 8090 9990 10340 12350	10943 11051 11188 11279 11438 11612 11817 12020 12423 12555 13077 13174 13726
10.0	13 16 20 22 27 30 35 40	5360870 5360880 5360890 5360900 5360910 5360920 5360930 5360940	4300390 4300390 4300390 4300390 4300390 4300390 4300390 4300410 4300410	\$18x54.7 # \$20x66 # \$18x54.7 # \$18x54.7 # \$20x66 # \$20x66 # \$24x80 # \$24x80 #	C8x11.5 # C10x15.3 # C10x15.3 # C12x20.7 # C12x20.7 # C15x33.9 #	15-1/2 20 15-3/4 15-3/4 20-1/4 20-1/4 24-1/4 24-1/2	A+2-1/2 A+0 A+2-1/2 A+2-1/2 A+0 A+0 A+0 A+0	3200	1/2	3/4	2125 2480 2788 3010 3699 4127 5089 6170	13844 13942 14027 14088 14277 14395 14659 14957
	42 48 52 55 60	5360950 5360960 5360970 5360980 5360990	4300410 4300410 4300410 4300410 4300410	\$24x80 # \$24x106 # W27x102 # W27x102 # W30x116 #	C15x33.9 # C15x33.9 # C15x33.9 # MC18x42.7 # MC18x42.7 #	24-1/2 24-1/2 27-1/2 27-1/2 27-1/2	A+0 A+1/2 A+0 A+0 A+3			1	7370 9400 9770 10710 12350	15287 15845 15947 16205 16656



SERIES 536 Top Running Single Girder Motorized Dual Drive Crane For Electric Hoists

53-12 Issued 1-4-88

1 to 10 TONS

STANDARD EQUIPMENT SPECIFICATIONS

DESIGN FACTORS Standard capacity ratings shall represent the net rated load at the hook of any type of hoist with the same load rating installed on the crane having a hoist trolley weight within the established limits. The crane shall be so designed that the load carrying parts, except structural members and hoisting ropes and gearing, shall be designed so that the calculated static stress in the material, based on the rated load, shall not exceed 20% of the published average ultimate strength of the material. This limitation of stress provides a margin to allow for variations in the properties of materials, manufacturing and operating conditions, and design assumptions. However, under no condition shall the crane be loaded beyond its rated capacity.

BEAM Bridge beam shall be designed in accordance with latest specifications of the Crane Manufacturers Association of America and shall be of standard structural shapes, constructed in accord with AISC specifications. Under full load the beam deflection shall not exceed 1/600 of the span. Bridge beam shall be selected structural steel member and shall provide level and straight tread surfaces for the hoist trolleys. The bridge beam shall be braced and welded to maintain squareness with the trucks. Bridge beam shall have adequate lateral stiffness with minimum lateral moment of inertia of 1/20 that of the vertical moment of inertia.

END TRUCKS The end truck frame shall be welded from structural shapes into a single unit as to prevent distortion and mismatch of gears under maximum rated load. End truck wheelbase shall be a minimum of 1/8 of the crane span. One wheel in each truck shall be geared and meshed with a pinion.

The truck shall contain diaphragm members welded to truck frames to maintain alignment and distribute truck loads uniformly on inner and outer truck member. A wheel gear protecting guard shall be part of the end truck. The truck shall be designed so that the drop of the truck will be limited to one inch in case of axle or wheel failure. Attachment of end truck to bridge beam shall be by welding to insure alignment.

CRANE WHEELS Crane wheels shall be double-flange alloy steel and have tapered tread surfaces hardened to 375 to 425 Brinell. Each wheel shall be supported on tapered roller bearings mounted on stationary axles suitable to take radial and thrust loads. The wheels shall be lubricated at the factory with sodiumbase grease and provided with a suitable reservoir of lubricant to eliminate the need for field lubrication. Wheel axles must have mounting nuts for bearing adjustment. Wheel mounting shall be designed so that axles and wheels can be removed without disturbing other truck elements of their alignment. Wheel treads shall be smooth, true and uniform within .010 inch tread diameter on all wheels.

RUNWAYS The crane runway, runway rails, and stops shall be furnished and installed by the user.

The runway rails shall be straight, parallel, level, and at the same elevation. The distance center to center and the elevation shall be within a tolerance of plus or minus 1/8". The runway rails should be standard rail sections of a proper size for the crane to be installed and must be provided with proper rail splices.

The crane runway shall be designed with sufficient strength and rigidity to prevent undue lateral or vertical deflection.

WELDING Welding shall be done by certified welders and shall be in accordance with the American Welding Society standards. All welds shall be ductile, shall have good weld penetration free of cracks and undercuts, and the welds shall manifest workmanlike appearance.

CRANE DRIVE Each end truck shall be provided with a helical gear motor reducer. The drive motor for each truck shall be fully enclosed, 30-minute duty rated class B insulation in a NEMA frame and shall comply with NEMA performance specifications. A spring set, electrically released AC disc type brake shall be integrally mounted on each motor in line with the reducer. The motors shall be integral with fully enclosed oil splash lubricated gear reducers. The gear reduction shaft shall be supported by precision ball or roller bearings.

BEARING LIFE All bearings in the crane wheels and the gear reduction shafts shall be designed for 5,000 hours B-10 bearing life minimum.

GEARING All gears shall be cut from solid blanks with 20 degree pressure angle involute shape for high strength and shall comply with AGMA specifications for load ratings. All gears operating at higher than 200 FPM pitchline speed shall be fully enclosed in oil tight housings and lubricated by splash principle.

BRIDGE BUMPERS The bridge shall be provided with bumpers capable of stopping the crane (not including the lifted load) at a rate of deceleration not to exceed three feet per second when traveling in either direction at 20% of rated speed. The bumpers shall have sufficient energy absorbing capacity to stop the crane when traveling at a speed of at least 40% of the rated load speed.

RAIL SWEEPS Bridge trucks shall be equipped with sweeps which extend below the top of the rail and project in front of the crane wheels.

ELECTRICAL CONTROLS Electrical controls shall be single speed or two speed as determined by speed required. Bridge control shall include a mainline contactor, manually operated fused mainline disconnect with lock-out provision, branch circuit fuses, reversing bridge control and transformer with fused secondary. Bridge control shall be mounted on bridge in NEMA type 3R enclosure actuated from a pendant push button station from either the trolley hoist or the bridge as determined by the requirements. Single speed or two speed bridge motors shall be provided with a solid state control to adjust the starting torque and acceleration.

BRIDGE CONDUCTORS AND WIRING Flat wire festoon tagline bridge conductor shall be provided with the crane to provide fully insulated bridge electrification. All other wiring of the crane shall be in rigid or flexible conduit in accordance with National Electrical Code.

PAINTING The crane before shipment shall be painted with one coat of red semi-gloss lead free enamel.

OPERATING AND MAINTENANCE Proper erection instructions, parts list and maintenance instructions will be furnished with the crane.

WARNING

Equipment described herein is not designed for, and should not be used for, lifting, supporting, or transporting humans. Modifications to upgrade, rerate, or otherwise alter the hoist or crane equipment shall be authorized only by the original manufacturer or qualified professional engineer.

Failure to comply with any one of the limitations noted herein may result in serious bodily injury.



Acco Products Division

A member of the Acco Material Handling Group

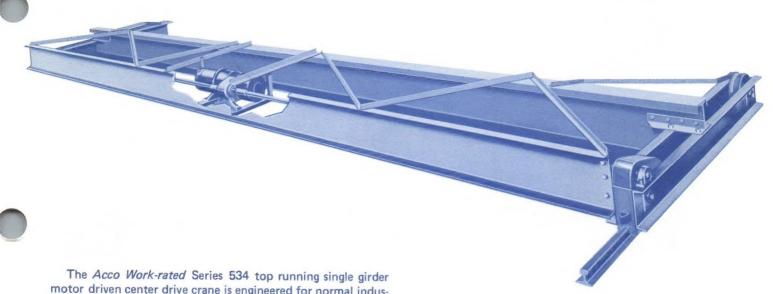


WORK-RATED'

SERIES 534

TOP RUNNING SINGLE GIRDER CRANE MOTOR DRIVEN—CENTER DRIVE

CAPACITIES 1 to 10 TONS SPANS to 50 FEET



The Acco Work-rated Series 534 top running single girder motor driven center drive crane is engineered for normal industrial service. The notched bridge beam design is best where overhead clearance and height of lift are important.

The Series 534 top running single girder crane, when combined with a *Work-rated*® or *Wright* American electric trolley hoist, is an excellent installation where it is practical to support crane runway rails from building columns.

All crane components are selected to give top performance, long, dependable service, and lowest maintenance.

The Series 534 crane is offered in capacities from one through ten tons, with spans up to 50 feet, and with a standard bridge travel speed of 75 FPM, single speed. Optional 125 and 175 FPM single speed with ACM or 75/25, 125/42 and 175/58 two speed with ACM is available. Five step variable speed is also available at 75, 125 or 175 FPM.

Bridge consists of heavy section beam, rigidly bolted to the end trucks for in-square operation. Longer spans are reinforced by capping channel welded to the bridge beam. A heavy structural channel outrigger member, running full length of bridge, is braced to the bridge beam on the crane drive side to provide lateral rigidity and support to the drive unit.

The end trucks are of welded-steel channel construction equipped with diaphragms, jig-welded and bored to provide alignment of wheels, axles and drive shaft. Wheel and gear replacement is accomplished without dismantling end trucks because of easy-to-remove axle. Rail sweeps and energy absorbing rubber bumpers are included for the crane's protection.

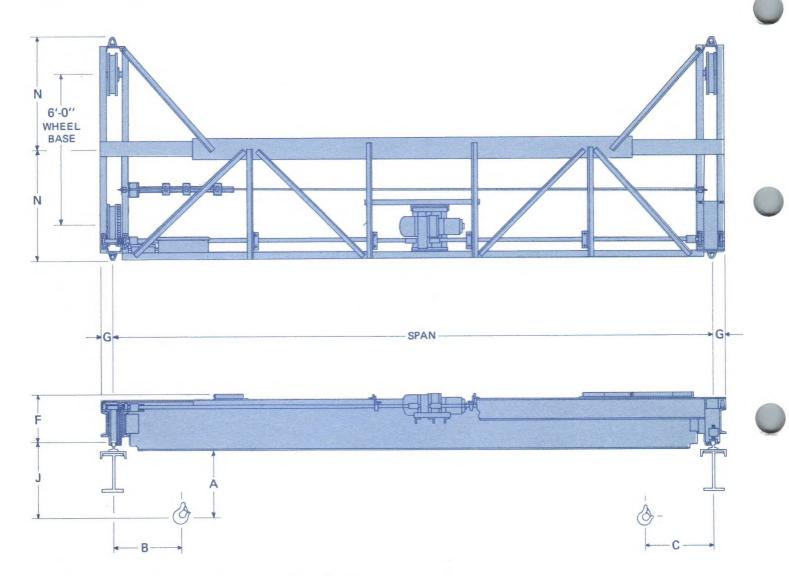
The end truck wheels are hardened steel double flanged. All end truck wheels are equipped with prelubricated, tapered roller bearings, two to each wheel.

The Series 534 enclosed center mounted standard 75 FPM single speed crane drive unit complete with ACM control and D.C. rectified disc brake provides smooth bridge motion and excellent load control. The Acco ACM is an all-solid state acceleration control module designed exclusively for crane and trolley traverse motions. The equal length squaring shaft is geared to wheels on both end trucks to provide uniform travel at both sides of the crane.

Standard electrical equipment includes NEMA type 3R enclosure, mainline magnetic contactor, manually operated fuseable disconnect switch with lockout provision, branch circuit fuses, single speed magnetic reversing bridge control, transformer with fused secondary, and flat wire festoon tagline bridge electrification. Optional pendant or traveling push-button from the bridge is available.

Series 534 cranes are custom-designed, using pre-engineered components which are built to provide a square crane, exact span, and true alignment. Each crane is fully assembled before shipment.

WORK-RATED® SERIES 534 TOP RUNNING SINGLE GIRDER CRANE MOTOR DRIVEN—CENTER DRIVE



A dimension represents hoist headroom. Refer to Wright-way® or Work-rated hoist data pages.

B and C dimension represents hoist end approach. Refer to dimension on *Wright-way or Work-rated* hoist data pages and add 15" for 'B' dimension. For all standard headroom hoists add 10" for 'C' dimension. For all close headroom hoists add 13-1/2" for 'C' dimension.

Dimensions in inches unless otherwise specified.

NOTE: Minimum OSHA clearance between crane and obstruction requires 2" lateral and 3" overhead.

Standard crane does not include runway collector bracket and runway collectors. Left-hand runway is standard location of runway conductors.

Order by Product Number. Specify: Exact span, bridge speed, runway rail, and beam size. State from which runway beam mainline conductors are located (Acco standard on left hand runway), dimension from top of runway rail to operating floor, power supply, horsepower of all motors and all optional equipment desired as listed in modifications and accessories section.



WORK-RATED® SERIES 534 TOP RUNNING SINGLE GIRDER CRANE MOTOR DRIVEN — CENTER DRIVE

1 to 10 TONS

53-15 Issued 8-31-87

Cap.	Max. Span	Crane Product	End Truck Product	Bridge	Capping	Outrigger			HP for F	PM	Weight	Wheel Load
(Tons) ((Ft.)	Number	Number	Beam	Channel	Channel	J	75	125	175	(Lbs.)	(Lbs.)(a)
1	20 25 30 40 50	5340010 5340020 5340030 5340040 5340050	4340010 4340010 4340010 4340010 4340010	12x31.8 # 12x31.8 # 15x42.9 # 15x42.9 # 18x54.7 #	 8x11.5 # 9x13.4 #	9×13.4 # 9×13.4 # 10×15.3 # 12×20.7 # 15×33.9 #	A- 7/8 A- 7/8 A+ 2-1/8 A+ 2-1/8 A+ 5-1/8	1/2 1/2 1/2 1/2 1/2	1/2 1/2 1/2 1/2 1/2	1 1 1 1	2165 2540 3230 4540 6875	2020 2114 2287 2614 3199
2	20 25 30 35 40 45 50	5340060 5340070 5340080 5340090 5340100 5340110 5340120	4340010 4340010 4340010 4340010 4340010 4340010	12x31.8 # 15x42.9 # 18x54.7 # 15x42.9 # 18x54.7 # 18x54.7 # 20x66 #	9x13.4 # 9x13.4 # 10x15.3 # 10x15.3 #	9x13.4 # 9x13.4 # 10x15.3 # 12x20.7 # 12x20.7 # 15x33.9 # 15x33.9 #	A- 7/8 A+ 2-1/8 A+ 5-1/8 A+ 5-1/8 A+ 5-1/8 A+ 5-1/8 A+ 7-1/8	1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2	1/2 1/2 1/2 1 1 1 1	1 1 1 1 1 1 1-1/2	2195 2836 3590 4215 5095 6331 7420	3178 3338 3527 3683 3903 4212 4484
3	20 25 30 35 40 45 50	5340130 5340140 5340150 5340160 5340170 5340180 5340190	4340010 4340010 4340010 4340010 4340010 4340010	15x42.9 # 18x54.7 # 15x42.9 # 18x54.7 # 18x54.7 # 20x66 # 24x80 #		9×13.4 # 9×13.4 # 10×15.3 # 12×20.7 # 12×20.7 # 15×33.9 # 15×33.9 #	A+ 2-1/8 A+ 5-1/8 A+ 2-1/8 A+ 5-1/8 A+ 5-1/8 A+ 7-1/8 A+ 11-1/8	1/2 1/2 1/2 1/2 1/2 1/2 1/2	1 1 1 1 1 1	1 1 1 1-1/2 1-1/2 1-1/2	2430 3135 3575 4705 5445 7190 8540	4836 5012 5122 5404 5589 6026 6363
5 & 6	20 25 30 35 40 45 50	5340200 5340210 5340220 5340230 5340240 5340250 5340260	4340020 4340020 4340020 4340020 4340020 4340020	18x54.7 # 15x42.9 # 18x54.7 # 20x66 # 24x80 # 24x80 # 24x80 #	10x15.3 # 8x11.5 # 10x15.3 # 10x15.3 # 10x15.3 # 12x20.7 #	9x13.4 # 10x15.3 # 10x15.3 # 12x20.7 # 12x20.7 # 15x33.9 # 15x33.9 #	A+ 2-1/4 A- 3/4 A+ 2-1/4 A+ 4-1/4 A+ 8-1/4 A+ 8-1/4	1/2 1/2 1/2 1 1 1	1 1 1 1 1-1/2 1-1/2 1-1/2	1-1/2 2 2 2 2 2 2 2	2990 3455 4200 5430 6555 7850 8810	8676 8792 8978 9286 9568 9891 10131
7-1/2	20 25 30 40 45 50	5340270 5340280 5340290 5340300 5340310 5340320	4340020 4340030 4340030 4340030 4340030	20×66 # 18×54.7 # 20×66 # 24×80 # 24×80 # 24×106 #	8x11.5 # 10x15.3 # 10x15.3 # 12x20.7 # 15x33.9 #	10x15.3 # 10x15.3 # 10x15.3 # 12x20.7 # 15x33.9 # 15x33.9 #	A+ 4-1/4 A- 2 A- 0 A+ 4 A+ 4-1/2	1 1 1 1 1 1	1-1/2 1-1/2 1-1/2 1-1/2 2 2	2 2 3 3 3 3	4030 4575 5590 7420 9035 11730	11138 11207 11461 11918 12322 12996
10	20 25 30 35 40 45 50	5340330 5340340 5340350 5340360 5340370 5340380 5340390	4340030 4340030 4340030 4340030 4340030 4340030	24×80 # 20×66 # 24×80 # 24×80 # 24×106 # 27×102 #		10×15.3 # 10×15.3 # 10×15.3 # 12×20.7 # 12×20.7 # 15×33.9 #	A+ 4 A+ 0 A+ 4 A+ 4 A+ 4-1/2 A+ 7-3/4	1 1 1 1 1 1 1 1	2 2 2 2 2 2 2 2	3 3 3 3 3 5 5	4430 4950 6049 6815 7696 10830 11540	14046 14178 14450 14642 14862 15645 15823

	Wheel	F	(b)			
End Truck (c)	Tread Diameter	Drive Unit #1	Drive Unit #2	G	N	
4340010	10	16-1/2	_	4-3/4	4'-1-1/2"	
4340020	12	18-5/8	19-1/2	5-1/8	4'-1"	
4340030	18	22-7/8	23-3/4	5-3/4	4'-5"	

⁽a) Wheel load includes allowance for 15% impact with a maximum hoist speed of 30 FPM. Standard industrial service. Refer to Acco structural beam guide for other requirements.

⁽b) #1 Drive Unit is 1/2 - 2 HP #2 Drive Unit is 3 or 5 HP.

⁽c) Max. ASCE Rail = 60#/Yd.



WORK-RATED® SERIES 534 TOP RUNNING SINGLE GIRDER CRANE MOTOR DRIVEN—CENTER DRIVE

STANDARD EQUIPMENT SPECIFICATIONS

DESIGN FACTORS Standard capacity ratings shall represent the net rated load at the hook of any type of hoist with the same load rating installed on the crane having a hoist trolley weight within the established limits. The crane shall be so designed that the load carrying parts, except structural members and hoisting ropes and gearing, shall be designed so that the calculated static stress in the material, based on the rated load, shall not exceed 20% of the published average ultimate strength of the material. This limitation of stress provides a margin to allow for variations in the properties of materials, manufacturing and operating conditions, and design assumptions. However, under no condition shall the crane be loaded beyond its rated capacity.

BEAM Bridge beam shall be designed in accordance with latest specifications of the Crane Manufacturers Association of America and shall be of standard structural shapes, constructed in accord with AISC specifications. Under full load the beam deflection shall not exceed 1/600 of the span. Bridge beam shall be selected structural steel member and shall provide level and straight tread surfaces for the hoist trolleys. Crane shall be reinforced with outrigger to provide squareness with the end truck, adequate lateral stiffness with a minimum lateral moment of inertia of 1/20 that of the vertical moment of inertia. Outrigger shall furnish support for squaring shaft and the crane drive motor and gear reducer assembly.

END TRUCKS End trucks shall be built of structural shapes and welded to a stable assembly to comply with general strength requirements previously stated. They shall provide proper wheel and bearing alignment for crane wheels and drives during the life of the crane. End truck wheelbase shall be a minimum of 1/8 of the crane span. One wheel in each truck shall be geared and meshed with a pinion mounted on the crane squaring shaft. The crane end trucks shall contain diaphragm members welded to truck frames to maintain alignment and distribute truck loads uniformly on inner and outer truck members. A wheel and wheel gear protecting guard shall be part of the end truck. The truck shall be designed so that, in case of a wheel axle or wheel failure, the drop of the truck will be limited to one inch. Attachment of end trucks to bridge beams shall be with fitted bolts which will insure alignment in assembly and convenient erection.

CRANE WHEELS Crane wheels shall be double-flange alloy steel and have tread surfaces hardened to 375 to 425 Brinell. Each wheel shall be supported on tapered roller bearings mounted on stationary axles suitable to take radial and thrust loads. The wheels shall be lubricated at the factory with sodium-base grease and provided with a suitable reservoir of lubricant to eliminate the need for field lubrication. Wheel axles must have mounting nuts for bearing adjustment. Wheel mounting shall be designed so that axles and wheels can be removed without disturbing other truck elements of their alignment. Wheel treads shall be smooth, true and uniform within .010 inch tread diameter on all wheels.

RUNWAYS The crane runway, runway rails, and stops shall be furnished and installed by the user.

The runway rails shall be straight, parallel, level, and at the same elevation. The distance center to center and the elevation shall be within a tolerance of plus or minus 1/8". The runway rails should be standard rail sections of a proper size for the crane to be installed and must be provided with proper rail splices.

The crane runway shall be designed with sufficient strength and rigidity to prevent undue lateral or vertical deflection.

WELDING Welding shall be done by certified welders and shall be in accordance with the American Welding Society standards. All welds shall be ductile, shall have good weld penetration free of cracks and undercuts, and the welds shall manifest workmanlike appearance.

CRANE DRIVE The crane drive motor shall be fully enclosed 30 minute duty cycle rated, with class B insulation complying with NEMA performance specifications. The motor shall be integral with a fully enclosed oil splash lubricated gear reduction. The motor and the gear reduction shafts shall be supported by permanently lubricated precision ball or roller bearings. The drive shaft shall provide synchronous drive from the gear reduction to both end trucks. The crane drive shall include an integrally mounted spring set electrically released D.C. rectified disc brake.

DRIVE SHAFT The drive shaft of the crane shall be supported on lubricated precision ball bearing pillow blocks based on ten foot maximum centers. These pillow blocks shall be lubricated through pressure grease fittings. The crane drive shaft shall be steel designed to limit torsional shaft stress to 6,000 psi. Maximum torsional twist angle in the drive shaft, shall not exceed one degree of the wheel rotation under maximum rated load regardless of load location.

BEARING LIFE All bearings in the crane wheels, those supporting the squaring shafts and the gear reduction shafts, shall be designed for 5,000 hours B-10 bearing life minimum.

GEARING All gears shall be cut from solid blanks with 20 degree pressure angle involute shape for high strength and shall comply with AGMA specifications for load ratings. All gears operating at higher than 200 FPM pitchline speed shall be fully enclosed in oil tight housings and lubricated by splash principle.

BRIDGE BUMPERS The bridge shall be provided with bumpers capable of stopping the crane (not including the lifted load) at a rate of deceleration not to exceed three feet per second when traveling in either direction at 20% of rated speed. The bumpers shall have sufficient energy absorbing capacity to stop the crane when traveling at a speed of at least 40% of the rated load speed.

RAIL SWEEPS Bridge trucks shall be equipped with sweeps which extend below the top of the rail and project in front of the crane wheels.

ELECTRICAL CONTROLS Electrical controls shall be single speed or multi speed as determined by speed required. Bridge control shall include a mainline contactor, manually operated fused mainline disconnect with lock-out provision, branch circuit fuses, reversing bridge control and transformer with fused secondary. Bridge control shall be mounted on bridge in NEMA type 3R enclosure actuated from a pendant push button station from either the trolley hoist or the bridge as determined by the requirements. Single speed or two speed bridge motors shall be provided with a solid state control to adjust the starting torque and acceleration.

BRIDGE CONDUCTORS AND WIRING Flac wire festoon tagline bridge conductor shall be provided with the crane to provide fully insulated bridge electrification. All other wiring of the crane shall be in accordance with National Electrical Code.

PAINTING The crane before shipment shall be painted with one coat of mustard yellow lead free chromate paint.

OPERATING AND MAINTENANCE Proper erection instructions, parts list and maintenance instructions will be furnished with the crane.

WARNING Equipment described herein is not designed for, and should not be used for, lifting, supporting or transporting humans.

Modifications to upgrade, rerate, or otherwise alter this crane or hoist equipment shall be authorized only by the original equipment manufacturer or qualified professional engineer.

Failure to comply with any one of the limitations noted herein can result in serious bodily injury and/or property damage.



Acco Chain & Lifting Products Division

A member of the Acco Material Handling Group

76 Acco Drive, P.O. Box 792, York, PA 17405 Telephone 717 741–4863 FAX 717 741–4956 Telex 84–0412





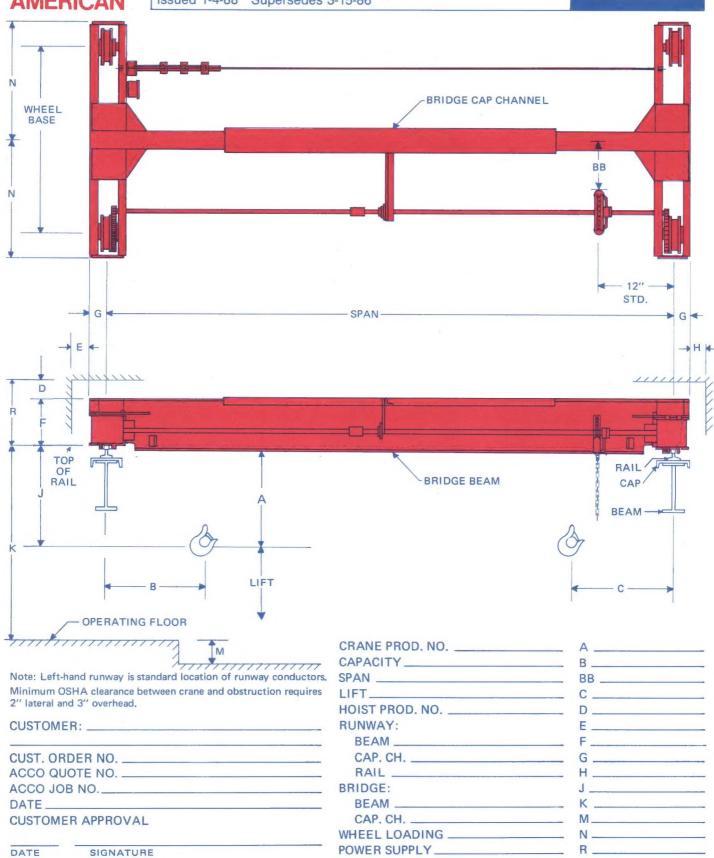
SERIES 535 Top Running Single Girder Crane Hand Operated For Use With Hand Hoists Or Electric Hoists

Replaces Series 532

53-18

Issued 1-4-88 Supersedes 3-15-86

1 to 10 TONS



WARNING Equipment described herein is not designed for.

warning Equipment described nerein is not designed to; and should not be used for lifting, supporting, or transporting humans. Modifications to upgrade, rerate, or otherwise alter the hoist or crane equipment shall be authorized only by the original manufacturer qualified professional engineer.

Failure to comply with any one of the limitations noted herein may result in serious bodily injury.

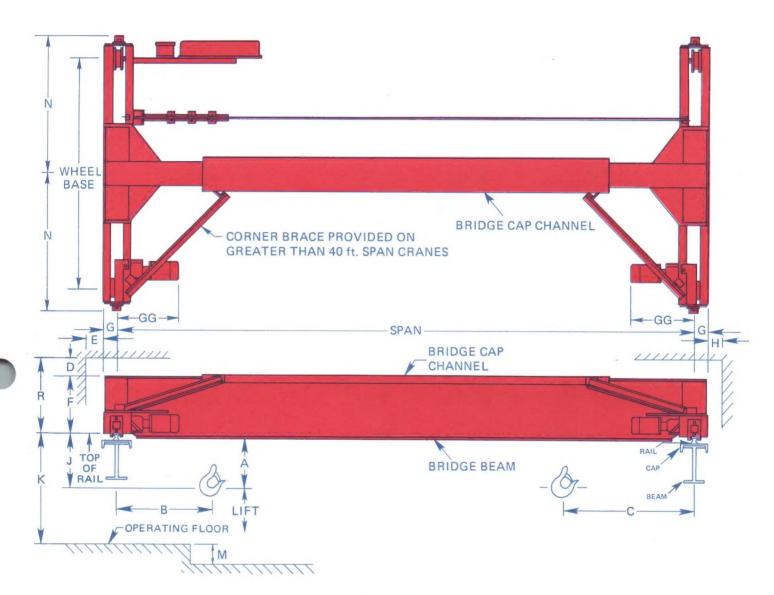
WB _



SERIES 536 Top Running Single Girder Motorized Dual Drive Crane For Electric Hoists

Replaces Series 533 53-19

Issued 1-4-88 Supersedes 3-15-86



Note: Left-hand runway is standard location of runway conductors.
Minimum OSHA clearance between crane and obstruction requires
2" lateral and 3" overhead

CUSTOMER:		-
CUST. ORDER NO.		
ACCO QUOTE NO		
ACCO JOB NO	400	
DATE		

CUSTOMER APPROVAL SIGNATURE

DATE

Acco Chain and Lifting Products Division 76 Acco Drive York, PA 17402

CRANE PROD. NO.	A
CAPACITY	В
SPAN	C
LIFT	D
HOIST PROD. NO.	E
RUNWAY:	F
BEAM	G
CAP. CH	Н
RAIL	J
BRIDGE:	K
BEAM	M
CAP. CH	N
WHEEL LOADING	. R
POWER SUPPLY	WB

GG

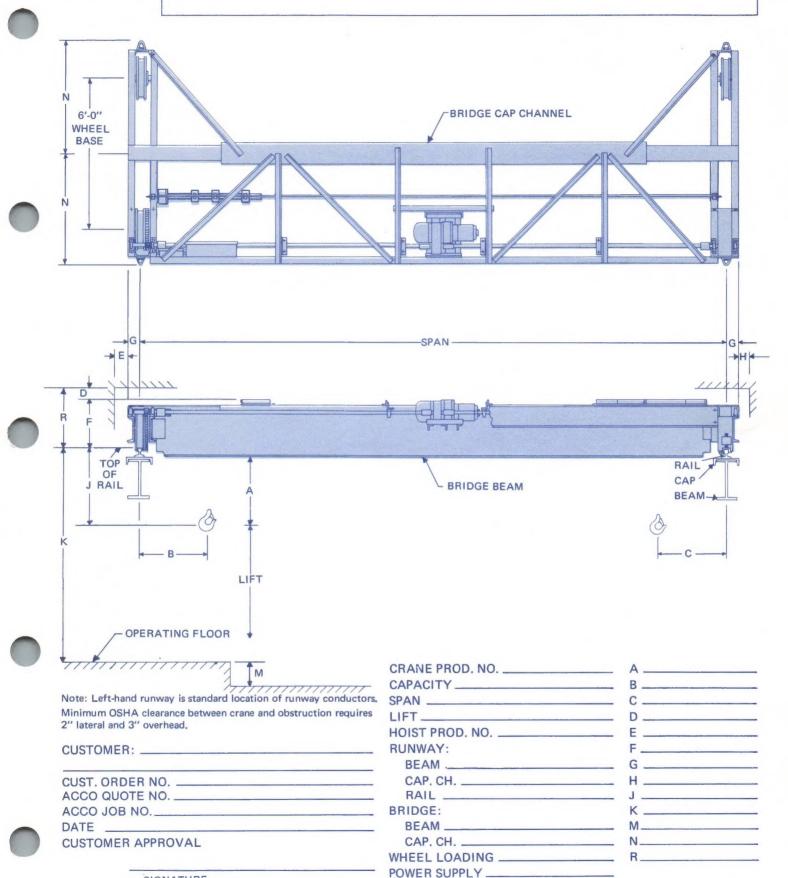
WARNING Equipment described herein is not designed for, and should not be used for lifting, supporting, or transporting humans. Modifications to upgrade, rerate, or otherwise alter the hoist or crane equipment shall be authorized only by the original manufacturer or qualified professional engineer. Failure to comply with any one of the limitations noted herein may result in serious bodily injury.

0188 5M TP Printed in USA ©Acco



WORK-RATED® SERIES 534 TOP RUNNING SINGLE GIRDER CRANE MOTOR DRIVEN—CENTER DRIVE

53-20 Issued 10-30-87



/CCO

SIGNATURE

Acco Products Division

A division of Babcock Industries Inc.

1110 E. Princess Street, York, PA 17403 Telephone 717 B43-1523 FAX 717 846-5387 Telex 84-0411 **WARNING** Equipment described herein is not designed for, and should not be used for lifting, supporting or transporting humans.

Failure to comply with any one of the limitations noted herein can result in serious bodily injury and/or property damage. © Babcock Industries Inc. 1987 Printed in U.S.A.